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# Learning to Read: an Unnatural Act

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Consider the child of six on the threshold of elementary school. The first thing one notices is his size: he stands only 45 inches (115 cm.), and he weighs only 45 pounds (20 kg.). But atop that small body rests a large head: its diameter of 53 cm. is nearly 95 percent of its adult size (Tanner 1978), and within it resides a brain containing a remarkable collection of skills and abilities.

The six-year-old's sight is as good as the adult's (Amigo 1972), and his hearing is nearly so (Elliott and Katz 1980).

The child has an excellent memory (Mandler, in press), and his learning ability is remarkable. Even a conservative estimate of the size of his vocabulary will show that he must have learned, on average, more than four new words every day since his first birthday (Carey 1978). He has already learned to speak and understand his native language with remarkable fluency.

The average American six-year-old can already produce and recognize more than a dozen vowels and nearly 30 consonants of English. He can produce and understand literally thousands of different words, and he can comprehend virtually any sentence that one can form with those words. To be sure, his language acquisition is not complete. Over the next decade he may have to smoothe out some rough spots in his phonology (Templin 1953), his vocabulary will grow by many more thousands of words (Oldfield 1963), and he must capture a few syntactic niceties which still escape him (Chomsky 1969). But his mastery of English would be the envy of any college graduate learning English as a second language.

Yet for all his cognitive and linguistic talents, the child has one peculiar linguistic shortcoming: he cannot read a word. Indeed, that is one of the primary reasons why we now send him to elementary school. His teacher

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now gives him the best instruction she can, every school day for the next nine months. At the end of the school year, we examine his skills again, using a standardized test battery, like the Metropolitan Achievement Tests. How does he do?

The 1970 Metropolitan Achievement Tests contain three reading subtests. The first of these, called Word Knowledge, contains 35 items in which the child is asked to select the one printed word of four which matches an accompanying drawing. All of the words in their spoken form must be familiar to every child of six; and most of them — like *pants* and *nose* and *train* and *clown* — are monosyllabic. Yet the average child — the child who scores at the 50th percentile on the test's norms — gets no more than two out of three correct. Moreover, fully a fourth of the children get less than half (17/35), and we must remember that they could get a fourth right by guessing, even if they could not read a word.

The second subtest, called Word Discrimination, is even more straightforward. The tester reads a word aloud, and the child is asked to find that word among four alternatives. Again, all the words are short and familiar (though now the distractors are more similar to the answer than in the first test), and the average child gets only 27 out of 40 right, a quarter get about half, and a tenth perform almost at chance.

The third subtest, called Reading, has two parts. One asks the child to choose the one sentence (of three) which goes with a picture; the other asks the child to read brief passages and then answer questions about them. The items are not at all demanding, and the child can get one of three right by guessing. Yet the average child gets less than half of the items right, and a fourth of the children perform at chance or worse.

The point of this grim recitation is not to find fault with our children, their teachers, or their methods, but rather to illustrate a point which has seemed obvious to most linguists, but less so to some reading experts (e.g., Goodman and Goodman 1979; F. Smith 1976), namely, that children do not easily learn to read.

To be sure, there are exceptions; some children learn to read with little apparent difficulty. By the end of the first grade (or even before) some children can read anything put in their hands (Durkin 1966). But the achievement test results show that the statistically average child, normally endowed and normally taught, learns to read only with considerable difficulty. He does not learn to read naturally. That is, despite his evident facility at learning, and despite having previously mastered what would seem to be the hardest part of reading (i.e., learning an unknown language), children almost never learn to read without instruction, and even when given explicit, devoted,